



Mercedes-Benz

**Service**

---

# **Maintenance Manual**

**Model Year 1981 – 1993**

Mercedes-Benz of North America, Inc.

S-2388-CS1

© Mercedes-Benz of North America, Inc., 1993

All rights reserved. Reproduction by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system or translation in whole or part is not permitted without written authorization from the publisher.

Published by Mercedes-Benz of North America, Inc.

Printed in U.S.A. 0994.1000 re

**Order number S-2388-CS1**

This manual provides detailed descriptions of maintenance jobs, testing and adjustment data, filling capacities, torque specifications, and special tools.

Each individual maintenance job is identified by a job number located at right or left heading of each page. The job numbers in the Maintenance Manual are identical with those on the Maintenance System Sheets and the Maintenance Booklets, so that the respective texts and data can be quickly located when performing maintenance work.

The first two digits of the 4-digit job number are the group numbers as used in the workshop literature. In this manner, each maintenance job is associated with the appropriate group.

The models and/or engines to which the jobs apply are listed below the job numbers.

Particularly extensive job numbers are subdivided according to models or engines.

Mercedes Benz of North America  
Service and Parts Literature

March 1993



## Preface

---

This Maintenance Manual applies to vehicles starting model year 1981 and covers all maintenance jobs for the following models:

Sales Designation	Model	Engine	1981	1982/83	1984/85	1986	1987	1988	1989	1990	1991	1992	1993
<b>107</b>													
380 SL	107.045	116.960		●									
380 SL	107.045	116.962			●	●							
380SLC	107.025	116.960	●										
560 SL	107.048	117.967				●	●	●	●				
<b>123</b>													
240 D	123.123	616.912	●	●									
300 D	123.130	617.912	●										
300 D Turbo	123.133	617.952		●	●								
300 CD	123.150	617.912	●										
300 CD Turbo	123.153	617.952		●	●								
300 TD Turbo	123.193	617.952	●	●	●								
280 E	123.033	110.984	●										
280 CE	123.053	110.984	●										
<b>124</b>													
300 D 2.5 Turbo	124.128	602.962						●	●	●	●		
300 D Turbo	124.133	603.960				●	●						
300 TD Turbo	124.193	603.960			●	●							
260 E	124.026	103.940				●	●	●					
300 E 2.6	124.026	103.940						●	●	●			
300 E 2.8	124.028	104.942									●		
300 E	124.030	103.980				●	●	●	●	●	●	●	
300 E	124.032	104.992											●
300 E 4MATIC	124.230	103.980							●	●	●	●	

Sales Designation	Model	Engine	1981	1982/83	1984/85	1986	1987	1988	1989	1990	1991	1992	1993
<b>124</b> <b>continued</b>													
300 CE	124.050	103.980				●	●						
300 CE	124.051	104.980						●	●	●			
300 CE	124.052	104.992										●	
300 CE Cabriolet	124.066	104.992										●	
300 TE	124.090	103.983				●	●	●	●	●			
300 TE	124.092	104.992										●	
300 TE 4MATIC	124.290	103.983						●	●	●	●		
400 E	124.034	119.975									●	●	
500 E	124.036	119.974								●	●		
<b>126</b>													
300 SD Turbo	126.120	617.951	●	●	●								
300 SDL Turbo	126.125	603.961				●	●						
350 SD Turbo	126.134	603.970									●		
350 SDL Turbo	126.135	603.970							●	●			
300 SE	126.024	103.981				●	●	●	●	●			
300 SEL	126.025	103.981				●	●	●	●	●			
380 SE	126.032	116.963		●		●							
380 SEL	126.033	116.961	●	●									
380 SEC	126.043	116.963		●									
420 SEL	126.035	116.965			●	●	●	●	●	●	●		
500 SEL	126.037	117.963			●								
500 SEC	126.044	117.963			●								
560 SEL	126.039	117.968				●	●	●	●	●	●	●	
560 SEC	126.045	117.968				●	●	●	●	●	●	●	

## Preface

---

Sales Designation	Model	Engine	1981	1982/83	1984/85	1986	1987	1988	1989	1990	1991	1992	1993
<b>129</b>													
300 SL	129.061	104.981						●	●	●	●		
500 SL	129.066	119.960						●	●	●			
500 SL	129.067	119.972									●		
600 SL	129.076	119.960									●		
<b>140</b>													
300 SD	140.134	603.971							●	●			
300 SE	104.032	104.990							●	●			
400 SE	140.042	119.971							●				
400 SEL	140.043	119.971							●				
500 SEL	140.051	119.970							●	●			
600 SEL	140.057	120.980							●	●			
500 SEC	140.070	119.970							●				
600 SEC	140.076	120.980							●				
<b>201</b>													
190 D 2.2	201.122	601.921			●								
190 D 2.5	201.126	602.911				●	●	●	●				
190 D 2.5 Turbo	201.128	602.961				●							
190 E 2.3	201.024	102.961/ 985			●	●							
190 E 2.3	201.028	102.985				●	●			●	●	●	
190 E 2.6	201.029	103.942				●	●	●	●	●	●	●	
190 E 2.3-16	201.034	102.983				●	●						

We want you to enjoy your MERCEDES-BENZ car for a long time to come. Vehicle safety and operational reliability are two very important factors, and in order to maintain them, a certain amount of maintenance and service work is necessary.

The MERCEDES-BENZ maintenance system includes all the necessary maintenance work which should be carried out at regular intervals if the vehicle is used under normal operating conditions.

## Routine Maintenance

- **Inspection service**

Up through model year 1991,  
once at 800-1000 miles/1300-1600 km  
As of model year 1992,  
once at 800-3000 miles/1300-5000 km

- **Lubrication service**

All Diesel models except 140.134  
every 5,000 miles/8,000 km  
All Gasoline models and model 140.134  
every 7,500 miles/12,000 km

- **Maintenance service**

every 15,000 miles/24,000 km

- **Additional work**

every 30,000 miles/48,000 km

In the case of **low mileage operation** (vehicle is driven infrequently), the maintenance service must be carried out at least once every 2 years.

### Engine oil and filter change

Required at specified mileage interval, or at least once a year when using year-round multigrade oil; otherwise twice a year (spring and fall). A detailed list of maintenance jobs is contained in the maintenance booklet following the maintenance vouchers.

Vehicle and engine models are indicated on the vehicle data card.

## Severe operating conditions

### Starting model year 1992

As a result of technical product enhancements, improved engine management systems, upgraded fuels and lubrication products, true cases of severe operating conditions will rarely exist in non-commercial passenger car applications. For a vehicle to qualify for severe operating conditions the following criteria must be met:

1. More than 50% short distance driving (less than 5 miles per trip) combined with engine operating at a temperature of less than 80°C (176°F), especially at low outside temperatures.
2. More than 50% operation in lower gears combined with high engine load (mountain driving, poor roads, etc.)

If these requirements are met, it is recommended that an additional oil change (without oil filter change) be performed between the scheduled engine oil change intervals, i. e. engine oil change every 2,500 miles or every 3,750 miles, depending upon model (*Vehicles occasionally exposed to severe operating conditions do not require an additional oil change.*)

### Model year 1981 through 1991

In case of **severe operating conditions** or heavy use mainly in city traffic or over short distances, frequent mountain driving, poor roads, dusty and muddy conditions, trailer towing, hard driving, etc., it may be necessary to carry out maintenance work at shorter intervals, i. e.:

Oil and filter change: half the normally recommended interval.

Automatic transmission: Fluid change (without filter change) every 15,000 miles/24,000 km  
Inspect tires.

Air cleaner, clean or replace element.

# Maintenance System

---

## Non-scheduled MB Maintenance Service

Every 15,000 miles/24,000 km, the maintenance service consists of 3 parts:

- General and Lubrication Service
- Engine Maintenance
- Safety Inspection

These parts can be performed individually on request, if particular driving conditions so require, or on a precautionary basis before leaving on a long trip, etc.

## Special Maintenance Measures

**Brake fluid** should be replaced annually, preferably in the spring, on all models except models 129 and 140 which should have a brake fluid change every 2 years.

**Engine coolant** should be checked for sufficient protection before the start of and during the cold season. Have the coolant (water/antifreeze mixture) replaced no later than after 3 years.

**It is necessary to have all regularly scheduled maintenance work performed to maintain your vehicle in good operating condition and to keep your warranty valid. While it is not required that such work be performed by factory-authorized dealers, it is strongly recommended to have an authorized MERCEDES-BENZ dealer do such work because he is equipped with tools, instruments, literature, and trained personnel necessary for correct and systematic completion of these jobs.**

## Spare parts

It is recommended that only MERCEDES-BENZ parts be used for service and repairs, since they have been made according to the manufacturer's specifications. It is also important to use only fuels and lubricants that meet factory specifications. See a MERCEDES-BENZ dealer for more information.

## Routine Checks

In addition to the lubrication and maintenance services, it is recommended that the following items be checked regularly and prior to any long trip:

**Engine oil level - during the break-in period not later than after 300 miles/500 km.**

**Automatic transmission fluid level**

**Brake (and clutch) fluid level**

If brake fluid needs to be added, see a MERCEDES-BENZ dealer to determine the cause, i.e. leaks or worn brake pads.

**Battery** - add distilled water only.

**Windshield washer system** - add water mixed with MERCEDES-BENZ windshield detergent, check operation and wiper blades.

**Tire pressure** - check at least every other week.

## Lubrication

Lubricate engine throttle control linkage rods and shafts and check for free movement and for wear every Lubrication Service, at least twice a year, and also after the use of engine cleaning solvent.

Use only Automatic Transmission Fluid. Refer to MBNA Factory Approved Service Products list for listing of approved ATF's.

## Maintenance Vouchers

The MERCEDES-BENZ dealer will certify in the maintenance booklet that all lubrication and maintenance services have been carried out at the correct intervals.

**Stickers** that indicate when the next lubrication service or maintenance service is necessary, or when the brake fluid must be changed, are provided in the middle of the maintenance booklet.

Sticker attachment locations:

In driver's door frame:

- Lubrication service and maintenance service

In the engine compartment:

- Brake fluid change



Lubrication service



Maintenance service

On maintenance booklet with window:

If required, enter next date for next scheduled service or brake fluid replacement.

Maintenance work does not include repair jobs.

For information concerning warranty, see

Warranty Policy Booklet.

